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EXAMINER
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/081,483  
Filing Date: February 22, 2002  
Appellant(s): FARR ET AL.

**MAILED**

**JAN 03 2007**

**GROUP 1700**

Edward A. Squillante, Jr.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 9-16-06 appealing from the Office action mailed 4-27-06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

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The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5, 135, 137	RUDICK	8-1992
5,143,288	KOHLER et al.	9-1992
3,947,567	BERG, JR. et al.	3-1976
5,971,357	DENTON et al.	10-1999
5,747,079	HOFFMAN	5-1998
SE9801752 A	BERGMAN	11-1999
W097/21605	FRUTIN	6-1997
WO 98/36671	FRUTIN	8-1998

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claim Rejections - 35 USC § 102.**

1. Claims 1,3, 5-8,15,16 are rejected under 35 U.S.C. 102(b) as being anticipated by Frutin (WO 98366710) as evidenced by Rudick (US 5135137).
2. Frutin teaches a frothed beverage that include a sparingly soluble effervescence inducing gas, such as nitrogen or nitrous oxide providing a head space that occupies 10-80% of the container at a pressure of at least 2.5 (e.g. 55 psi up to 120 psi) at 5°C, that is held in a container with an aerosol valve that is biased closed, which would prevent opening. The text of those sections of Title 35, U.S. Code not included in this action can when inverted. The pressure in the head space above the liquid in the container is sufficient to cause the beverage to be discharged into the mouth of the consumer, since 55 psi is capable of forcing the product to be discharged ( Page 1, lines 1-10, Page 2, line 36 to Page 4, line 7, Page 4, lines 19-26, Page 5, line 1 to Page 6, line 15, Page 8, lines 13-26, Page 12, lines 22-34, Page 18-20).
3. Furthermore, with respect the recitation: "the valve is *one which is designed to be* opened via the consumer's mouth", this limitation implies an *intended manner of operating* of operating the valve. As stated in MPEP 2114, the manner of operating the device does not differentiate apparatus claim from the prior art: A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). Frutin teaches the valve is suitable for

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dispensing whipped cream and may be a tilt valve (Abstract, Page 4, lines 5 and 6).

While Frutin does not explicitly teach the tilt valve is designed to be opened via the consumer's mouth, as evidenced by Rudick, a tilt valve design suitable for dispensing whipped cream and pressurized beverages is also a design capable of being opened via a consumer's mouth or finger (See Figure 5, lines 4-7,27-35,64-66, and Abstract).

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) as evidenced by Rudick (US 5135137) as applied to claims 1,3,5-8,15,16 further in view of Kohler et al. (US 5143288).
3. Frutin teaches an aerosol valve and teaches features may be provided to urge remaining beverage in the container, which may have become effervescent, out of the container (Page 4, lines 19-26), but is silent in teaching a dip tube that urges the effervescent fluid out of the container, as recited in claim 12, with holes that communicate with the headspace as recited in claim 13.
4. Kohler et al. also teach aerosol valves for a container comprising a liquid and nitrogen system at similar pressures (e.g. up to 120 psi), and teach that one can maintain a constant pressure to urge the material out of the container, even as the level reaches the bottom of the container, by providing a dip tube with a hole in communication with the headspace of the container. Kohler et al. teach the desired

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discharge pressure is maintained by allowing gas residing in the headspace to mix with the liquid as it travels up the dip tube, and that the actual location depends on the desired discharge consistency (Column 1, line 49-67, Column 3, lines 5-55, Column 5, line 50 to Column 6, line 35 ). Therefore, it would have been obvious to include a hole in communication with the headspace of the container of Frutin since Frutin teaches providing features to urge a remaining nitrogen effervesced beverage out of the container using an aerosol valve, and Kohler et al. providing an aerosol valve with a dip tube with a hole in communication with the headspace of a container will assure that one could urge all of the liquid out of the container and a more consistent amount of gas, such as nitrogen, is mixed with liquid.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) in view of Kohler et al. (US 5143288) as applied to claims 12 and 13 above, further in view of Berg Jr. et al. (US 3947567).

6. Frutin teaches the amount of gas discharged with the liquid when the effervesced liquid is expelled depends on the size of the headspace and the pressure of the gas in the headspace (Page 20, lines 17-19). However, Frutin is silent in teaching any particular amount of gas discharged with the liquid .

7. Berg et al. also teach compositions for forming effervescent liquids . In explaining the particular desired degree of effervescence for products of Berg et al., Berg et al. teach the conventional effervescent beverage is 1 volume of gas per volume of liquid. (Column 4, line 39 to Column 5, line 16, Column 5, lines 62-66, Column 6,

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lines 5-53, and Column 6, line 62 to Column 7, line 4). Therefore, it would have been obvious to further modify Frutin such that the volume ratio of gas to liquid is at least 0.5 to 1 when the beverage is expelled since Frutin teaches one may adjust the head space and pressure to provide a desired gas to liquid ratio for the expelled beverage and Berg teaches the conventional effervescent beverage has a gas to liquid volume ratio is 1:1.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) as applied to claims 1,3,5-8,15,16 further in view of (Frutin WO 97/21605).

9. Frutin '671 teaches the container may be fitted with a device which injects flavor into the container (Page 13, line 33 to Page 14, line 5), such as a modified version of Frutin '605 (Page 6, lines 6-15), and Frutin '605 teaches including a container a supplemental compartment with a sparingly soluble effervescence inducing gas and a liquid that releases the contents upon opening the container, or relieving the pressure within the container (Page 4, lines 16-23, Page 14, lines 23-36, and the embodiments of 16-18). Therefore, it would have been obvious to modify Frutin '671 and include a widget for releasing the gas and a flavor when the valve is opened, since Frutin '671 teaches this may be done using a modified container of Frutin '605, and Frutin '605 teaches widgets for a container to supply a sparingly soluble effervescence inducing gas and a flavor liquid upon releasing the pressure within the container.

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10. Claims 1,4,9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 5747079) in view of Denton et al. (US 5971357).

11. Regarding claims 1,4, 9, 10,Hoffman teaches an oxygenated beverage, which is effervescent (i.e. oxygen saturated similar to carbon dioxide saturated beer and sparkling wine ), wherein the beverage is tea, coffee, root beer, or water, held in a container at 2-6 atmospheres, can reduce or control halitosis, and may be taken via ingestion or spraying, which would involve a valve structure (Column 2, lines 20-65, Column 3, line 10 to Column 4, line 67) . Hoffman is silent in teaching the particular temperature at which the beverage is stored and that the valve structure is *one which is designed to be* opened via the consumer's mouth as recited in claim 1, such as with an actuator to opens the valve that is shaped and positioned for engagement in a user's mouth or teeth for dispensing as recited in claim 10.

12. With respect to the recited valve structure, Denton et al. teach it is advantageous to provide an actuator to opens the valve that is shaped and positioned for engagement in a user's mouth or teeth for dispensing when a person is required to keeps both hands free to do something else. Denton et al. teach such an actuator/valve combination that is easy to use, inexpensive, does not leak , and can be used in combination with a variety of pressurized containers(Column 1, lines 10-43, Column 2, lines 10-41, column 4, lines 41-59, Column 6, lines 29-41, Column 7, lines 5-27). Therefore it would have been obvious to include an actuator to opens the valve that is designed being opened by a user's mouth or teeth for dispensing since Denton et al. teach an bite actuator/valve combination that is easy to use, inexpensive, does not leak, can be used



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in combination with a variety of pressurized containers, and offers the advantage of allowing a person to keep both hands free to do something else while consuming a beverage.

13. With respect to the particular temperature in combination with the 2-6 atmospheres pressure, Hoffman teaches the amount of oxygen dissolved at a given pressure depends on the particular temperature of the container and the amount of oxygen dissolved affects the ability of the beverage to control or eliminate halitosis, as well as the stored beverage's own susceptibility to microbial growth (Column 2, line 45 to column 3, line 7, Table 1). Therefore, it would have been obvious to select any particular storage temperature between 5-15°C, depending on (1) the type of beverage (e.g. root beer, which is normally chilled), (2) the desired level of oxygenation and effectiveness at controlling halitosis as compared to the amount of microbial risk.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 5747079) in view of Denton et al. (US 5971357), as applied to claims 1,4,9, and 10 above, further in view of Bergman (SE9801752 A).

15. Modified Hoffman is silent in teaching a button on the bite valve to consume the beverage, which may be tea, coffee, water, or root beer.

16. Bergman teaches a water dispensing valve operated by biting, but additionally utilizes a button to control the amount dispensed based on the bite pressure applied to the button (English Abstract). Therefore, it would have been obvious to modify Hoffman and include a button on the bite-valve, since Bergman teaches this provides a means

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for controlling the dispensing amount by bite pressure and one would have been substituting one conventional bite-valve for another for the same purpose: dispensing water.

#### **(10) Response to Argument**

Appellants argue that the '671 reference is directed to a method of producing a frothed liquid like a milk shake or whipped cream and that the ex. in figures 12 and 13 of the '671 reference have a serrated nozzle 310 for discharging the whip cream, which would injure a consumers mouth. However, the recitation "the valve is one which is designed to be opened via the consumer's mouth" is seen as an intended manner of operating the valve. See the office action as to a discussion of MPEP 2114, paragraph 3, under the 102 rejection.

Appellants argue that nothing suggests dispensing an effervescent beverage into the mouth of the consumer and that the liquid is under gaseous pressure. However, pressurized gas is found in the headspace, which is seen to make an effervescent beverage (page 3, lines 1-6). The claims are to an apparatus and composition, and not to a method of drinking the beverage. The apparatus has been shown by the '671 reference as evidenced by reference to Rudick.

Appellants argue that the tilt valve in the '671 reference is serrated (310, fig. 4). However, appellants claim does not exclude the valve of the references as it broadly states that it is designed to be opened via the consumer's mouth. The limitation "opened via the consumer's mouth" is an intended manner of use, and as explained in the rejection under 102 above, the structure taught by Frutin '671 (a tilt valve designed

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for dispensing whipped cream and used as a pressurized beverage dispensing valve) is a structure that is designed to be opened, or is capable of being opened, via the consumer's mouth. In addition, Frutin '671 discloses a serrated nozzle, but does not explicitly state these are sharp notches or suggest that they might cause injury. Certainly the type of material in the nozzle would help determine if the nozzle could cause injury.

As to the 103 rejection, Appellants argue that the content of the container of the '671 reference is consumed by the consumer after the container has been opened to the atmosphere and the beverage of the '671 reference requires negative pressure in order to draw liquid from a straw in the bottle. And nothing is consumed under pressure in the '671 reference. However, Frutin is not limited to utilizing a straw for negative pressure, and the embodiment relied on in the rejections is the positive pressure structure that is a standard aerosol valve, known to operate on positive pressure (page 3, lines 21, 22, page 4, lines 3-7, fig. 12 and 13) and positive pressure is disclosed in lines 1-56 on page 3, and 5, lines 5-20. As to "consumed under pressure this is not claimed as stated above. See *In re Van Geuns*, supra. It is noted that the beverage of Frutin is held under positive pressure sufficient to cause the beverage to be discharged as recited in the claims as explained in the office action.

Kohler et al. '288 as above teaches the use of a dip tube with a hole in communication with the headspace of the container. No weight is given to when the content of the container are consumed. Aerosol sprays are known to be under pressure. If one used an aerosol spray valve in place of the valve of Frutin then

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pressure would have occurred. As stated before, the claims do not recite the container "to be opened to the atmosphere before a beverage may be consumed". This limitation from the specification cannot be read into the claims.

Appellants argue as to claim 14 that the beverage container of Frutin "has to be opened to the atmosphere before a beverage may be consumed". The claims do not require that the "container be opened to the atmosphere" before the beverage is consumed. This limitation from the specification cannot be read into the claims. See *In re van Geuns*, supra. The phrase "has to be opened to the atmosphere before a beverage or liquid may be consumed" implies that the container cannot be opened by the mouth. As stated in the rejection above, Rudick teaches the container of Frutin is capable of being opened in the mouth. The motivation to combine is that aerosol spray valves are well, and if one wanted to put a liquid under pressure, this is what one would use.

As to claim 17 and 18, Appellants argue that the references are not combinable. However, as above it would have been obvious to modify Frutin '671 and include a widget for releasing the gas and a flavor when the valve is opened, since Frutin '671 teaches this may be done using a modified container of Frutin '605, and Frutin '605 teaches widgets for a container to supply a sparingly soluble effervescence inducing gas and a flavor liquid upon releasing the pressure within the container.

Appellants argue as to 1, 4, 9, 10 that Hoffman is directed to simply using solutions to eliminate mouth odor and Denton et al. does not cure the deficiencies of Hoffman because it is merely directed to a fluid delivery valve. In Hoffman, col. 2, lines

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7-17, it is disclosed that one of the advantages of the invention is that it is an ingestible beverage and teaches tea, coffee, root beet or water in a container. Denton et al. teach a mouth-operated valve to discharge a beverage from a container so that a consumer can drink hands free. Denton et al. set out to solve the problem of driving or riding a bike an operating a beverage container valve, and the valve of Denton is intended to be used with conventional beverage containers (col. 1, lines 21-31, col. 4, lines 60 to col. 5, line 10). Certainly the secondary references do not teach all that is claimed, but are used for what is cited in the office action.

Appellants argue as to claim 11, that there is no motivation to combine the Berman reference '752A with the other references. However, Berman was used to show that it is known to bite on a sleeve button with a first stop that can be urged against a second stop in the valve casing. Bergman teaches a water dispensing valve operated by biting, but additionally utilizes a button to control the amount dispensed based on the bite pressure applied to the button (English Abstract). Therefore, it would have been obvious to modify Hoffman and include a button on the bite-valve, since Bergman teaches this provides a means for controlling the dispensing amount by bite pressure and one would have been substituting one conventional bite-valve for another for the same purpose: dispensing water.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Conferees:

Helen Pratt



Milton Cano



Gregory Mills



hp 12-26-06